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EXAMINER				
BELL, WILLIAM P				
ART UNIT		PAPER NUMBER		
1745				
NOTIFICATION DATE		DELIVERY MODE		
11/24/2010		ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/524,671

Applicant(s)

KOTTE ET AL.

Examiner

WILLIAM P. BELL

Art Unit

1745

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 September 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 17-19, 21-24, 26 and 28-35 is/are pending in the application.
- 4a) Of the above claim(s) 18, 24, 26 and 28-32 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 17, 19, 21-23 and 33-35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 February 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-940)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 17, 19, 21-23, and 33-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Legrand (International Patent Application Publication No. WO 01/98613, already of record) in view of Ichinohe (U.S. Patent No. 4,663,901, already of record), and further in view of Mackey (U.S. Patent No. 6,467,232, already of record). Regarding claim 17, Legrand teaches a method for fabrication of a vehicle drop glass with a transparent pane (see abstract and pane 1 in Figure 1), on an extremity of which a support part is to be attached (see stirrups 7 and 8 in Figure 1), which cooperates with a drive and/or guide device for heightwise movement of the pane (see guides 9 and 10 in Figure 1), the method comprising orienting and setting the pane in a device which is a model of an assembly space for the pane (see page 5, lines 21-23 and Figure 3, wherein pane 1 is oriented and set in the depicted device), such that the pane is supported by at least three predetermined contact points on a main face of the pane (see page 5, lines 21-25, wherein the pane is supported by a plurality of "candles" from the underside of the pane), wherein the main face of the pane is a surface that faces toward an interior of a vehicle when the pane is installed (see Figure 3, wherein the

pane is curved such that the underside of the pan corresponds to the surface which faces the interior of a vehicle when the pane is installed, conventional side windows being curved outward from the point of view of the interior of the vehicle), wherein the at least three predetermined contact points represent a reference plane that is independent of a curved structure of the pane between the at least three points (by definition, any three points define a plane in three-dimensional space; that plane is a geometrical construct defined only by the points and therefore is independent of the structure of pane, curved or not); depositing a curable plastic material on the pane in a region of an assembly with the support part (see page 9, line 35 through page 10, line 10, wherein the use of various adhesives for attaching the stirrups to the pane is taught, including reactive polyurethane); fashioning the curable plastic material in a fixed position in a space inside the device into a fashioned part that includes a reference face that is aligned in a defined manner in relation to the at least three predetermined contact points and that corresponds to a contact face of the support part such that, after the support part is assembled with the pane, the fashioned part defines a predetermined position of the support part in relation to the three predetermined contact points so that a lateral tilt of the pane and a position of the upper sealing edge of the pane in relation to the support part is predetermined (see Figure 3, wherein stirrups 7 and 8 are positioned on and attached to pane 1 by the illustrated device in a predefined position relative to the position of the pane on the device; the adhesive becomes an integral fashioned part of the assembly upon curing; as shown in Figure 9, the adhesive fills the spaces between pane 1 and the U-shaped structure of the stirrups; Legrand teaches

that the pane and stirrup are positioned relative to the desired configuration of the finished vehicle drop glass (see abstract); the faces of the fashioned part (i.e., the cured adhesive) correspond to the recited reference face and are defined in relation to the contact points because they are determined by the orientation of the stirrup relative to the pane and its support/positioning mechanism; these reference faces correspond to contact faces defined as the faces of the fashioned part (i.e., the cured adhesive) which contact the pane itself; see page 3, lines 14-25, wherein Legrand teaches that the device allows for precise positioning of the pane relative to a predetermined point and deviations in the pane are adapted for by the junction of the yoke and the pane); and curing the plastic material (see page 10, line 7, wherein a slow reacting polyurethane adhesive is taught, the reaction being a curing operation).

Legrand does not teach depositing the curable plastic material on the pane with the aid of at least one tool. Ichinohe teaches a method of adhesively attaching a support bracket to a pane of glass using an "anti-flow member" tool to prevent flow of the adhesive from at least one end of the slot in the support bracket (see column 3, lines 30-33 and Figure 2). It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the method taught by Legrand with the use of the anti-flow member tool taught by Ichinohe for the benefit of controlling the flow of the adhesive on the pane (see Ichinohe, column 3, lines 30-33). Legrand does not teach that the support part is made of at least one additional part which is attached to the fashioned part in the predetermined position by the reference face fashioned on the fashioned part. Ichinohe teaches a support bracket which comprises a series of ribs

(see column 3, lines 6-13 and ribs 14 and 15 in Figure 2), which constitute additional parts of the support bracket. Once fixed to the glass pane by the adhesive, the ribs would be attached to the reference face of the fashioned part, as defined above, in the predetermined position. It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the method taught by Legrand with the ribs on the support bracket taught by Ichinohe for the benefit of maintaining close contact between the bracket and the glass pane (see Ichinohe, column 3, lines 9-11).

Legrand, as modified by Ichinohe, teaches orienting and setting the pane in the device such that the pane lies on at least three predetermined contact points, i.e., the "candles" (see page 5, lines 24-26), but is silent regarding the position of those candles (see page 5, lines 26-27). Legrand, as modified by Ichinohe, teaches that the contact points are set by pre-adjustment (see the abstract by Derwent), but it is not clear whether the pre-adjustment is made for each window that is being processed or for each model (i.e., each set of windows intended for a specific application). Mackey teaches a method for fabrication of a vehicle drop glass with a transparent pane (see column 1, lines 8-11 and column 3, lines 15-17), on an extremity of which a support part is to be attached (see column 2, lines 47-55), which cooperates with a drive and/or guide device for heightwise movement of the pane (see column 2, line 54 and column 3, lines 15-17), the method comprising orienting and setting the pane in a device (see Figure 4), which is a model of an assembly space for the pane (see column 3, lines 29-34), such that the pane lies on at least three predetermined contact points on a main face of the pane (see column 5, lines 24-33, wherein ledge surface 460 represents a

plurality of contact points of device 434 which contacts the lower surface of pane 10); and attaching to a peripheral edge of the pane a support part in a fixed position in relation to the predetermined contact points (see column 5, lines 42-48 and column 4, lines 8-49). Mackey teaches that the support part may be formed in a variety of manners (see column 2, lines 55-60) and may be attached by gluing with curable plastic material (see column 5, lines 2-18). Mackey teaches a plurality of contact points along an upper sealing edge of the main face of the pane (see the left edge of the pane as drawn in Figure 4) and a point on a lower edge of the main face of the pane close to where the support part is to be attached (see the rightmost point of contact surface 460 along the upper edge of the pane as drawn in Figure 4). As taught by Mackey, the predetermined contact points are not adjusted or even adjustable. Instead, the ledges are used "as a check fixture, i.e., a fixture used to check the conformance of the window to the desired shape along selected marginal edges" (see column 5, lines 21-23). It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the method taught by Legrand, as modified by Ichinohe, by locating the "candles" of Legrand at fixed positions along the edges of the pane, as taught by Mackey, for the benefit of aligning the pane to the desired elevational contour of the edges of the window (see Mackey, column 5, lines 27-29). It would have been obvious to one of ordinary skill in the art at the time of the invention to have located each of a plurality of panes on the supporting device using the same predetermined contact points on a main face of the panes, as taught by Mackey, for the benefit of checking the conformance of the panes to the desired shape along the edges (see Mackey, column

5, lines 34-42). It further would have been obvious to one ordinary skill in the art at the time of the invention to have selected the support points relative to the desired configuration of the support part(s) because Mackey suggests making such an adaptation (see column 5, lines 49-54).

Regarding claim 19, Legrand teaches a method wherein the fashioned part is shaped while bonding to the pane (since the stirrups are being bonded to the pane via the adhesive, the surfaces of the stirrups in contact with the adhesive inherently serve to shape at least part of the adhesive).

Regarding claim 21, Legrand teaches a method wherein fashioning the curable plastic material includes using the support part including the additional part as a portion of a mold to shape the fashioned part by pressing the support part onto a mass of plastic constituting the fashioned part (since the stirrups are being bonded to the pane via the adhesive, the surfaces of the stirrups in contact with the adhesive inherently serve to shape at least part of the adhesive; since the surfaces shape the adhesive, they function as a mold for the adhesive).

Regarding claim 22, Legrand does not teach first attaching the stirrups and then filling the space between the stirrups and the pane with adhesive. However, one of skill in the art readily appreciates that there are only three possible ways of assembling the stirrups to the pane: (1) applying the adhesive to the pane and then attaching the stirrups; (2) applying the adhesive to the stirrups and then attaching them to the pane (Ichinohe teaches this method; see column 1, lines 56-61); and (3) placing the stirrups on the pane and injecting adhesive in the gap between the stirrups and the pane. It

would have been obvious to one of ordinary skill in the art at the time of the invention to have considered any of these methods of attaching the stirrups, as all are well known alternative. One would be motivated to try each method to determine which one would result in the most efficient use of the adhesive.

Regarding claim 23, Legrand teaches a method wherein the support part is assembled to the fashioned part by bonding with an adhesive deposited in addition between the fashioned part and the support part (see page 10, lines 2-10, wherein Legrand teaches providing an additional "instant" adhesive to assist in the assembly of the stirrups to the pane).

Regarding claim 33, Legrand teaches a method wherein separate contact points and stops are provided to position the pane (see page 5, lines 24-33, wherein stops 22-26 are separate from the supporting "candles").

Regarding claim 34, Legrand teaches a method for fabrication of a vehicle drop glass with a transparent pane (see abstract and pane 1 in Figure 1), on an extremity of which a support part is to be attached (see stirrups 7 and 8 in Figure 1), which cooperates with a drive and/or guide device for heightwise movement of the pane (see guides 9 and 10 in Figure 1), the method comprising orienting and setting the pane in a device (see page 5, lines 21-23 and Figure 3, wherein rollers 22-26 serve to orient pane 1 which has been placed in the depicted device) such that the pane lies at least three predetermined contact points on a main face of the panel (see page 5, lines 21-25, wherein the pane is supported by a plurality of "candles" from the underside of the pane), wherein the main face of the pane is a surface that faces toward an interior of a

vehicle when the pane is installed (see Figure 3, wherein the pane is curved such that the underside of the pan corresponds to the surface which faces the interior of a vehicle when the pane is installed, conventional side windows being curved outward from the point of view of the interior of the vehicle), the at least three predetermined contact points represent a reference plane that is independent of a curved structure of the pane between the at least three points (by definition, any three points define a plane in three-dimensional space; that plane is a geometrical construct defined only by the points and therefore is independent of the structure of pane, curved or not); depositing a curable plastic material on the pane in a region of an assembly with the support part (see page 9, line 35 through page 10, line 10, wherein the use of various adhesives for attaching the stirrups to the pane is taught, including reactive polyurethane); fashioning the curable plastic material in a fixed position in a space inside the device into a fashioned part that includes a reference face that is aligned in a defined manner in relation to the at least three predetermined contact points and that corresponds to a contact face of the support part (see Figure 3, wherein stirrups 7 and 8 are positioned on and attached to pane 1 by the illustrated device in a predefined position relative to the position of the pane on the device; the adhesive becomes an integral fashioned part of the assembly upon curing; as shown in Figure 9, the adhesive fills the spaces between pane 1 and the U-shaped structure of the stirrups; Legrand teaches that the pane and stirrup are positioned relative to the desired configuration of the finished vehicle drop glass (see abstract); the faces of the fashioned part (i.e., the cured adhesive) correspond to the recited reference face and are defined in relation to the contact points because they are

determined by the orientation of the stirrup relative to the pane and its support/positioning mechanism; these reference faces correspond to contact faces defined as the faces of the fashioned part (i.e., the cured adhesive) which contact the pane itself); and curing the plastic material (see page 10, line 7, wherein a slow reacting polyurethane adhesive is taught, the reaction being a curing operation).

Legrand does not teach first forming the fashioned part and then directly attaching the contact face of the support part to the reference face of the fashioned part. However, one of skill in the art readily appreciates that there are only three possible ways of assembling the stirrups to the pane: (1) applying the adhesive to the pane and then attaching the stirrups; (2) applying the adhesive to the stirrups and then attaching them to the pane (Ichinohe teaches this method; see column 1, lines 56-61); and (3) placing the stirrups on the pane and injecting adhesive in the gap between the stirrups and the pane. It would have been obvious to one of ordinary skill in the art at the time of the invention to have considered any of these methods of attaching the stirrups, as all are well known alternatives. One would be motivated to try each method to determine which one would result in the most efficient use of the adhesive. Legrand teaches that the support part is attached to the pane such that the position and orientation of the pane relative to the support part is predetermined (see page 3, lines 14-25, wherein Legrand teaches that the device allows for precise positioning of the pane relative to a predetermined point and deviations in the pane are adapted for by the junction of the yoke and the pane).

Legrand does not teach depositing the curable plastic material on the pane with the aid of at least one tool. Ichinohe teaches a method of adhesively attaching a support bracket to a pane of glass using an "anti-flow member" tool to prevent flow of the adhesive from at least one end of the slot in the support bracket (see column 3, lines 30-33 and Figure 2). It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the method taught by Legrand with the use of the anti-flow member tool taught by Ichinohe for the benefit of controlling the flow of the adhesive on the pane (see Ichinohe, column 3, lines 30-33).

Legrand, as modified by Ichinohe, teaches orienting and setting the pane in the device such that the pane lies on at least three predetermined contact points, i.e., the "candles" (see page 5, lines 24-26), but is silent regarding the position of those candles (see page 5, lines 26-27). Legrand, as modified by Ichinohe, teaches that the contact points are set by pre-adjustment (see the abstract by Derwent), but it is not clear whether the pre-adjustment is made for each window that is being processed or for each model (i.e., each set of windows intended for a specific application). Mackey teaches a method for fabrication of a vehicle drop glass with a transparent pane (see column 1, lines 8-11 and column 3, lines 15-17), on an extremity of which a support part is to be attached (see column 2, lines 47-55), which cooperates with a drive and/or guide device for heightwise movement of the pane (see column 2, line 54 and column 3, lines 15-17), the method comprising orienting and setting the pane in a device (see Figure 4), which is a model of an assembly space for the pane (see column 3, lines 29-34), such that the pane lies on at least three predetermined contact points on a main

face of the pane (see column 5, lines 24-33, wherein ledge surface 460 represents a plurality of contact points of device 434 which contacts the lower surface of pane 10); and attaching to a peripheral edge of the pane a support part in a fixed position in relation to the predetermined contact points (see column 5, lines 42-48 and column 4, lines 8-49). Mackey teaches that the support part may be formed in a variety of manners (see column 2, lines 55-60) and may be attached by gluing with curable plastic material (see column 5, lines 2-18). Mackey teaches a plurality of contact points along an upper sealing edge of the main face of the pane (see the left edge of the pane as drawn in Figure 4) and a point on a lower edge of the main face of the pane close to where the support part is to be attached (see the rightmost point of contact surface 460 along the upper edge of the pane as drawn in Figure 4). As taught by Mackey, the predetermined contact points are not adjusted or even adjustable. Instead, the ledges are used "as a check fixture, i.e., a fixture used to check the conformance of the window to the desired shape along selected marginal edges" (see column 5, lines 21-23). It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the method taught by Legrand, as modified by Ichinohe, by locating the "candles" of Legrand at fixed positions along the edges of the pane, as taught by Mackey, for the benefit of aligning the pane to the desired elevational contour of the edges of the window (see Mackey, column 5, lines 27-29). It would have been obvious to one of ordinary skill in the art at the time of the invention to have located each of a plurality of panes on the supporting device using the same predetermined contact points on a main face of the panes, as taught by Mackey, for the benefit of checking the

conformance of the panes to the desired shape along the edges (see Mackey, column 5, lines 34-42). It further would have been obvious to one ordinary skill in the art at the time of the invention to have selected the support points relative to the desired configuration of the support part(s) because Mackey suggests making such an adaptation (see column 5, lines 49-54).

Regarding claim 35, Legrand teaches a method wherein separate contact points and stops are provided to position the pane (see page 5, lines 24-33, wherein stops 22-26 are separate from the supporting "candles").

Response to Arguments

3. Applicant's arguments with respect to claims 17 and 34 have been considered but are moot in view of the new ground(s) of rejection. As discussed above, Legrand teaches supporting the pane with "candles" underneath the pane, but is silent regarding the positions of those "candles". Mackey suggests that a plurality of panes be supported along their edges using fixed, non-adjustable supports. Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to have used fixed "candles" along the edges of the pane in the method Legrand. Mackey further teaches support positions which correspond to the claimed positions and suggests that one would modify the support positions according to the desired location(s) of the support part(s). Thus, while Mackey may or may not teach that the contact points are the same from pane to pane as applicant argues, the fixed "candles" located along the edges of the panes in the method of Legrand as modified by Mackey would result in

supporting a plurality of panes in the same positions. As taught by Legrand, the support points and stops are configured to align the pane relative to the assembly of the vehicle such that any variations in the pane are accommodated by the adhesive used to fill the space between the pane and the support part. Thus, the pane and the support part are attached in a manner in which a lateral tilt and a position of the upper sealing edge of the pane in relation to the support part are predetermined because the edges of the pane are fixed in space relative to the support part.

Conclusion

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to WILLIAM P. BELL whose telephone number is (571)270-7067. The examiner can normally be reached on Monday - Thursday, 8:00 am - 5:30 pm; Alternating Fridays, 8:00 am - 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Philip Tucker can be reached on 571-272-1095. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/WILLIAM P BELL/
Examiner, Art Unit 1745

/Philip C Tucker/

Supervisory Patent Examiner, Art Unit 1745